

if possible, two exact observations of her *Apparent* place among the *Fixt stars* being made, at two places thus distant in *Latitude*, and as near as may be under the same *Meridian*, by these Observators concurring at the same time, her true and exact distance may be hence collected, not onely for that time, but at all other times, by any single Observer's viewing her with a *Telescope*, and measuring exactly her *Apparent* Diameter. It were likewise desirable, that as often as there happens any considerable *Eclipse* of the *Sun*, that this also might be observed by them, noting therein the exact measure of the greatest Obscuration compared with the then *Apparent* Diameter of his Disk. For by this means, after the distance of the *Moon* hath been exactly found, the distance of the *Sun* will easily be deduced.

As for the time, fittest for making Observations of the *Moon*, that will be, when she is about a Quarter or somewhat less illuminated, because then her light is not so bright, but that with a good *Telescope* she may be observ'd to pass close by, and sometimes over several *Fixt stars*; which is about four or five days before or after her Change: Or else at any other time, when the *Moon* passes near or over some of the bigger sort of *Fixt stars*, such as of the first or second *Magnitude*; which may be easily calculated and foreseen: Or best of all, when there is any *Totall Eclipse* of the *Moon*; for then the smallest *Telescopical stars* may be seen close adjoyning to the very body of the *Moon*. Of all which particulars the two Correspondents are to agree, as soon as he, that is to joyn abroad, shall be found out; whereupon they are mutually to communicate to each other, what they shall have thus observed in each place.

### *Of an Observation, not long since made in England, of Saturn.*

This Observation was made by Mr. *William Ball*, accompanied

panied by his brother, Dr. Ball, October 13. 1665. at six of the Clock, at Mainhead near Exeter in Devonshire, with a very good Telescope near 38 foot long, and a double Eye-glass, as the observer himself takes notice, adding, that he never saw that Planet more distinct. The observation is represented by Figure 3. concerning which, the Author saith in his letter to a friend, as follows; This appear'd to me the present figure of Saturn, somewhat otherwise, than I expected, thinking it would have been decreasing, but I found it full as ever, and a little hollow above and below. Whereupon the Person, to whom notice was sent hereof, examining this shape, hath by Letters desired the worthy Author of the *Systeme of this Planet*, that he would now attentively consider the present Figure of his *Anses* or *Ring*, to see whether the appearance be to him, as in this Figure, and consequently whether he there meets with nothing, that may make him think, that it is not *one* body of a Circular Figure, that embraces his *Diske*, but *two*.

And to the end that other Curious men, in other places might be engaged, to joyn their Observations with him, to see, whether they can find the like appearance to that, represented here, especially such Notches or Hollownesses, as at A and B, it was thought fit to insert here the newly related Account.

### *A Relation of some Mercurial Observations; and their Results.*

Modern *Philosophers*, to avoyd Circumlocutions, call that Instrument, wherein a Cylinder of Quicksilver, of between 28. and 31. Inches in Altitude, is kept suspended after the manner of the *Torricellian* Experiment; a *Barometer* or *Baroscope*, first made publick by that Noble Searcher of Nature. Mr. Boyle, and imployed by Him and others, to detect all the minut variations in the Pressure and weight of the Air. For the more  
curious

